

TRANSLATION**PATENT COOPERATION TREATY****PCT****INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference OP040006	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/JP2005/004190	International filing date (day/month/year) 10.03.2005	Priority date (day/month/year) 16.03.2004
International Patent Classification (IPC) or national classification and IPC G06F17/30		
Applicant TURBO DATA LABORATORIES INC.		

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.	
2.	This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.	
3.	This report is also accompanied by ANNEXES, comprising:	
a.	<input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>12</u> sheets, as follows:	
	<input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).	
	<input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.	
b.	<input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).	
4.	This report contains indications relating to the following items:	
	<input checked="" type="checkbox"/> Box No. I	Basis of the report
	<input type="checkbox"/> Box No. II	Priority
	<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
	<input type="checkbox"/> Box No. IV	Lack of unity of invention
	<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	<input type="checkbox"/> Box No. VI	Certain documents cited
	<input type="checkbox"/> Box No. VII	Certain defects in the international application
	<input type="checkbox"/> Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2005/004190

Box No. I

Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-43 _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. 13-19, 30-36, 47-53 _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 2, 7, 9, 11, 12, 20, 24, 26, 28, 29, 37, 41, 43, 45, 46, 54 _____ received by this Authority on 01.06.2005
- nos.* _____ received by this Authority on _____
- ☒ the drawings:
- sheets fig. 1-50 _____ as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☒ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☒ the claims, nos. 1, 3-6, 8, 10, 21-23, 25, 27, 38-40, 42, 44 _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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International application No.

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	13-19, 30-36, 47-53	YES
	Claims	2, 7, 9, 11, 12, 20, 24, 26, 28, 29, 37, 41, 43, 45, 46, 54	NO
Inventive step (IS)	Claims		YES
	Claims	2, 7, 9, 11-20, 24, 26, 28-37, 41, 43, 45-54	NO
Industrial applicability (IA)	Claims	2, 7, 9, 11-20, 24, 26, 28-37, 41, 43, 45-54	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
<p>Document 1: R. SEDGEWICK, as translated by Kohei NOSHITA et al., Algorithm, Vol. 1 =Kiso/Seiretsu, first edition, Kindai Kagaku Sha, 1990, pages 39 to 55</p> <p>Document 2: JP 10-240741 A (Nippon Telegraph And Telephone Corp.), 11 September 1998, paragraphs [0001] to [0006] and fig. 3 to 5</p> <p>The inventions set forth in claims 2, 9, 12, 20, 26, 29, 37, 43, 46 and 54 are presented in document 1 (pages 39 to 55) and document 2 (paragraphs [0001] to [0006]) cited in the international search report; therefore, the inventions in question lack novelty and do not involve an inventive step.</p> <p>Document 1 (in particular, refer to page 48 and fig. 4.6) and document 2 (in particular, refer to paragraph [0006] and fig. 5) present techniques wherein each non-root node is associated with the parent node of said non-root node. Furthermore, document 1 (in particular, refer to fig. 4.12) and document 2 (in particular, refer to fig. 5) present search techniques wherein the nodes in the same generation are given priority over the child nodes.</p>			

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

The inventions set forth in claims 7, 11, 24, 28, 41 and 45 lack novelty in the light of document 1, and do not involve an inventive step in the light of documents 1 and 2. Document 1 (in particular, refer to fig. 4.9) presents a search technique wherein the child nodes are given priority over the nodes in the same generation.

The inventions set forth in claims 13, 14, 30, 31, 47 and 48 do not involve an inventive step in the light of documents 1 and 2 cited in the international search report. Documents 1 and 2 do not mention selecting either a depth-first mode or a breadth-first mode. However, techniques for selecting a mode from among a plurality of modes are well known, and thus it would have been easy for a person skilled in the art to apply such a technique.

The inventions set forth in claims 15 to 19, 32 to 36 and 49 to 53 do not involve an inventive step in the light of documents 1 and 2 cited in the international search report. Documents 1 and 2 do not disclose a method for converting the form of the tree structure. However, techniques for converting the form of a tree structure are well known, and thus it would have been easy for a person skilled in the art to apply such a technique.